

Notes and Descriptions of Some North American Omethinae

(Coleoptera: Omethidae)

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The tribe Omethini was elevated to family status by Crowson (1972), as a member of the superfamily Cantharoidea. Crowson recognized three subfamilies in this family: Driloniinae with the single genus *Drilonius* Kiesinwetter (Asiatic species); Matheteinae, *Matheteus* LeConte and *Ginglymocladius* Van Dyke (North American species); Omethinae, *Omethes* LeConte, *Blatchleya* Knab, *Troglomethes* Wittmer and *Symphyomethes* Wittmer (North American and east Asian species). Magis and Wittmer (1974) confirmed the validity of Crowson's findings.

Crowson (1972) separated the Omethidae from the Cantharidae on the following characters: Labrum free, sclerotized and visible; abdominal tergites without paired glandular openings; wings with five anal veins in the main group and a closed anal cell; claws without setae; tarsal segments 3 and 4 with deeply bifid ventrally adhesive lobes. Characters of the Cantharidae are: Labrum not distinct, more or less membranous; abdominal tergites with paired glandular openings; wings with not more than four anal veins in the main group and no closed anal cell; each claw with one or more setae; ventral adhesive lobe of tarsal segment 3, if present, not deeply lobed.

Wittmer and Fender (6-VII-73), collected a series of *Troglomethes oregonensis* Wittmer along the Little Nestucca River, Tillamook County, Oregon. These were collected by sweeping the herb layer of the area. Dominant plant species swept were *Polystichum munitum* (Kaulf.), *Maianthemum dilatatum* (Wood) Nels. and Macbr., *Oxalis oregona* Nutt. and *Viola glabella* Nutt. In this collected series were two females. Since the female of this species was previously undescribed, a description of the female is given below.

TROGLOMETHES OREGONENSIS Wittmer

Female.—Generally similar to male, shorter and stouter; head without transverse excavation and ornamentation; head except appendages black; pronotum black with pale margins confined to more sharply rounded anterior angles; hind wings greatly abbreviated, extending only to apex of third visible abdominal sternite in repose; intermediate antennal segments about twice as long as wide (about three times as long as wide in male).

Material examined.—Oregon, Tillamook County, Little Nestucca River, 16-VII-73, Wittmer and Fender, in the collection of the California Academy of Sciences.

Wittmer's male type was collected at Cannon Beach Clatsop County, Oregon. Additional males have been studied from the following Oregon localities: Colombia County, Goble; Siuslaw National Forest, Castle Rock; Tillamook County, Little Nestucca River; Benton County, Marys Peak; Lane County, Blue River, H. J. Andrews Experimental Station; Iron Mountain Trail.

TROGLOMETHES LEECHI Wittmer

This species was described from a male collected at GLEN ALPINE, EL DORADO COUNTY, CALIFORNIA. Wittmer provisionally associated two females with this species from Tallac and Yosemite Valley, El Dorado County, California. Additional male records, all from California, now include: Shasta County, Burney (2); El Dorado County, Fallen Leaf Lake; Tulare County, Colony Mill. This gives a north-south range of some 300 miles along California's Sierra Nevada. A female from Chester, Plumas County, California, is provisionally placed with this series. In this specimen the hind wings are fully developed. It lacks the transverse excavation of the head, a character apparently confined to the males of *Troglomethes*. Wittmer (1970) noted that the excavations of the males might be secretory pores for sex pheromones.

Crowson (1972) states that the wings of female *Troglomethes* are fully developed. This is apparently true of *Troglomethes leechi* Wittmer, based on provisionally placed females. In *Troglomethes oregonensis* Wittmer, the hind wings of the female are greatly abbreviated.

Malthomethes, New Genus

Type species.—*Malthomethes oregonus*, head somewhat protruded beyond and eyes remote from anterior margin of pronotum (fig. 2). Mandibles dentate. Last segment of maxillary palpus elongate, slender. Antennae eleven segmented, simple, third segment subtriangular, shorter and narrower than second. Pronotum transverse, sides arcuate, evenly rounded into arcuate base, hind angles obliterated. Claws simple, with a small basal tooth. Aedeagus of male with apices exposed, side pieces of dorsal plate not fused, suture quite apparent, median lobe lying ventrally free, uncovered as in other Omethinae.

Malthomethes oregonus, New Species

Male.—Black; frons, palpi, antennae and legs piceous, apices of all femora and apical tarsal segments paler, marginal bead of pronotum narrowly paler; pubescence cinereous, long, fine, sparse, suberect and inconspicuous. Length 3–4 mm. Head, including eyes, about as wide as pronotum, shining, sparsely punctured, more coarsely so behind and near eyes; mandibles long, slender and arcuate, with an acute internal tooth at middle; antennae extending to about basal third of elytra, simple, third segment subconical, shorter and narrower than second and about half as long as fourth, intermediate segments about twice as long as wide; eyes moderately large and prominent. Pronotum shining, transverse, almost half again as wide as long, anterior margin broadly shallowly concave, anterior angles

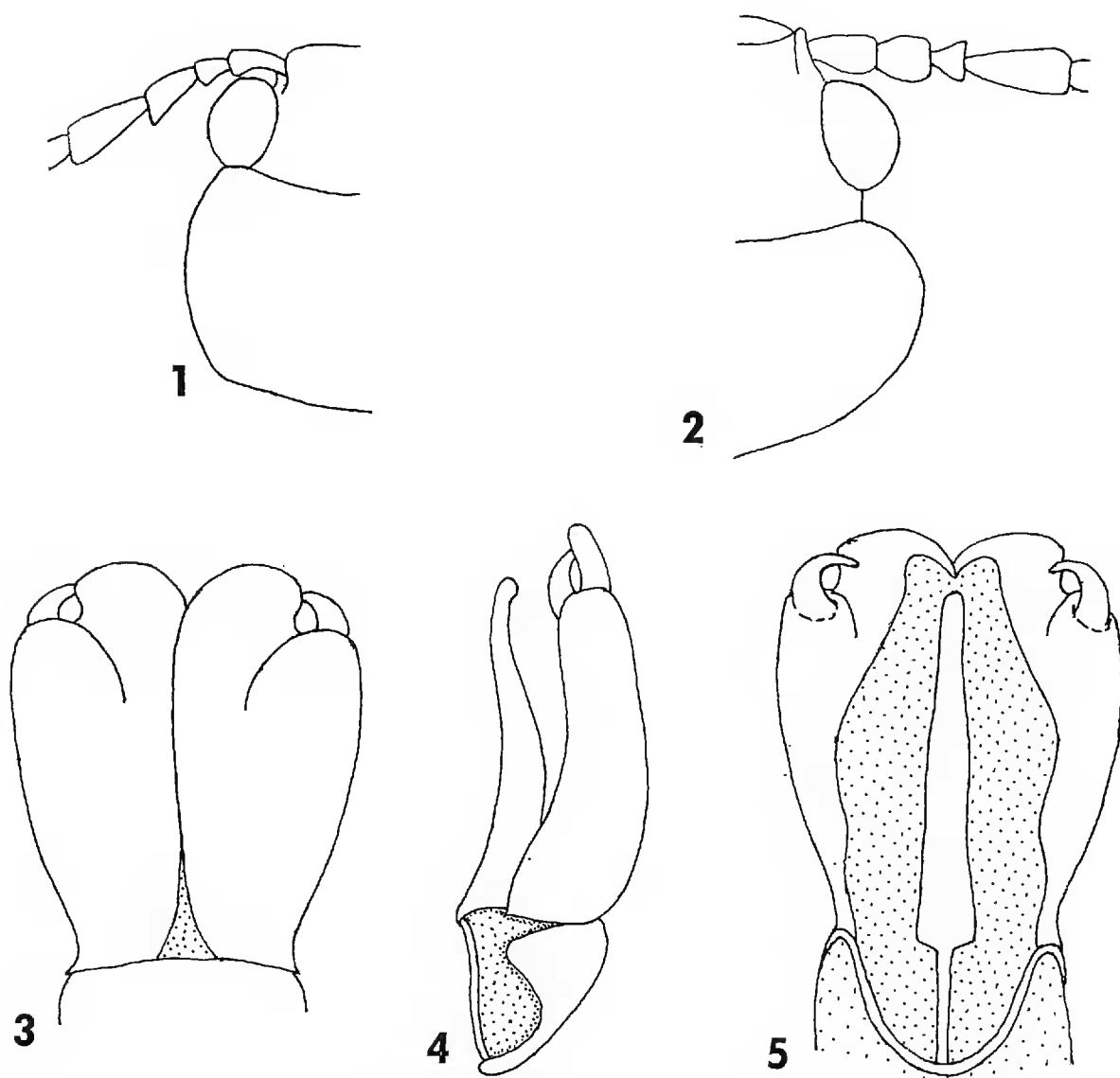


FIG. 1. *Omethes marginatus* LeC., left half of head and pronotum. Figs. 2-5. *Malthomethes oregonus* Fend. Fig. 2. Right half of head and pronotum. Fig. 3. Aedeagus, dorsal aspect. Fig. 4. Same, lateral aspect. Fig. 5. Same, ventral aspect.

obtusely rounded, sides arcuate and narrowly reflexed, evenly rounded into arcuate base, margin broadly reflexed towards obsolete posterior angles, bottom of reflexed area closely coarsely punctured, at broadest depth with about two rows of punctures, remainder of pronotum finely sparsely punctured. Scutellum finely sparsely punctured, somewhat expanded apically, apex shallowly emarginate. Elytra elongate, ligulate, each about eight times as long as wide, extending beyond abdominal apex by nearly one-fourth their length, parallel sided to near apical fifth, then narrowing to apices, apices sharply rounded towards sutural side, feebly rugose basally, becoming more coarsely closely so apically, very delicate, strongly tending to curl in dried condition. Thorax shining beneath, finely sparsely punctured. Abdominal sternites feebly shining, more coarsely punctured than thorax, apical end of aedeagus exposed. Aedeagus as in figs. 3-5.

Female.—Unknown.

Holotype male.—OREGON, COOS COUNTY, COOS HEAD, 22-VII-72, D. McKey-Fender, in the collection of the California Academy of Sciences. Paratypes: (1), Oregon, 5 miles south of Gold Beach, 5-VIII-50; (4), Oregon, Lane County,

Blue River, H. J. Andrews Experimental Forest, young Douglas Fir stand, I B P Biome Survey, plastic window trap, William Nagel (on following dates): 6-VII-72, 20-VII-72, 2-VIII-72 and ?-VII-73.

The genus *Blatchleya* Knab and the new genus described above require an emendation of Crowson's (1972) key to subfamilies of the Omethidae. The second dichotomy of his key should read (the figures indicated pertain to Crowson's work):

2. Mandibles stout (fig. 5). Tarsal segments 1-2 with finely setose ventral adhesive pads. Claws with a small basal tooth. Wing venation characteristic (fig. 18). Antennal segments 3 similar in size to 2, much smaller than 4. Abdominal segments with distinct paratergites. North American species. ----- Matheteinae.
- Mandibles much less stout. Claws more strongly toothed. Antennal segment 3 evidently longer or evidently shorter than 2. Abdominal segments without distinct paratergites. American and east Asian species. Omethinae

Wittmer's key for the separation of Omethinae males is modified to include the new genus *Malthomethes*.

KEY TO THE GENERA OF THE OMETHINAE BASED ON MALES

1. Head covered by pronotum at least to posterior margins of eyes (fig. 1) 2
Head somewhat protruded, eyes not adjacent to anterior margin of pronotum (fig. 2) ----- *Malthomethes* new genus
2. Head transversely excavated between eyes ----- *Troglomethes* Witt.
Head not excavated between eyes ----- 3
3. Two antennal segments enlarged and excavated ----- *Blatchleya* Knab.
No antennal segments enlarged and excavated ... ----- 4
4. Head strongly rugose, partly plicate. Elytra with finely impressed longitudinal lines ----- *Omethes* LeC.
Head almost smooth or a little punctate. Elytra without longitudinal impressed lines ----- *Symphyomethes* Witt.

Females of many species of the Omethidae and the Cantharidae do not possess the diagnostic characteristics used to recognize the males. Unless taken in close company with the males, many are impossible to place to species or seldom even to species group. In the Omethinae, females are unknown for the genera *Malthomethes* and *Symphyomethes*. They are only provisionally recognized for *Troglomethes leechi* Wittmer. For these reasons it is felt ill-advised to attempt a key to the females at this time.

LITERATURE CITED

- CROWSON, R. A. 1972. A review of the classification of Cantharoidea (Coleoptera), with the identification of two new families, Cneoglossidae and Omethidae. *Revista de la Universidad de Madrid*, 21(82): 35-77, 35 figs.

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ZOOLOGICAL NOMENCLATURE

ANNOUNCEMENT A (N.S.) 96

Required six months' notice is given of the possible use of plenary powers by the International Commission on Zoological Nomenclature in connection with the following names listed by case number. (See *Bull. zool. Nom.* 32, part 2, 27th June 1975.)

2044. Suppression of *Acarus pseudogallarum* Vallot, 1836 and *Phytoptus coryligallarum* Targioni Tozzetti, 1885 (Acarina, Eriophyoidea).
1944. *Lyda alternans* Costa, 1859 (Insecta, Hymenoptera) proposed precedence over *Lyda inanis* Klug, 1808.
2068. *Phloiotribus* Latreille, 1796 (Insecta, Coleoptera) proposed suppression.

Comments should be sent in duplicate, citing case number, to the Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London, SW7 5BD, England. Those received early enough will be published in the *Bulletin of Zoological Nomenclature*.—MARGARET GREEN, *Scientific Assistant*.